

## STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

## **BUREAU OF ENGINEERING**

SUITE 700, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402 (615) 741-0791

JOHN C. SCHROER COMMISSIONER

BILL HASLAM GOVERNOR

TO: Will Reid

Assistant Chief Engineer of Operations

FROM: Brad Freeze, Director of Traffic Operations

SUBJECT: Proprietary Item Request and Justification Town of Smyrna

**Traffic Signal Vehicle Detection:** The Town of Smyrna is requesting that Wavetronix radar traffic signal vehicle detection equipment be used in all signalization projects within the Town over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The Town of Smyrna currently operates and maintains 51 signalized intersections, of which Wavetronix radar detection is installed at 12 signalized intersections within the Town's jurisdiction. In addition, an upcoming Advanced Transportation Management System (ATMS) project will be adding Wavetronix to 26 intersections which brings the total to 38 signalized intersections within the Town's jurisdiction. The Town of Smyrna began utilizing the Wavetronix radar detection units to replace other technologies due to their unreliability which has resulted in increased efficiency of signalized intersection operations within the Town. Reliable detection is a key component in our efforts to provide a more efficient traffic system and to reduce air pollution within the Town of Smyrna.

The Town of Smyrna staff has been trained properly to install, operate, maintain, and troubleshoot the Wavetronix detection system. This knowledge allows the technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system. By utilizing these devices as the standard for the Town of Smyrna, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

I, Brad Freeze, Director of the Traffic Operations Division of the Tennessee Department of Transportation, do hereby certify that in accordance with the requirements of 23 CFR 635.411(a) (2) that the patented or proprietary items listed above are essential for the synchronization of existing facilities.

Assistant Chief Engineer of Operations

Date



December 5, 2018

Traffic Operations Division James K. Polk Building, 18<sup>th</sup> Floor 505 Deaderick St., Nashville, TN 37243

SUBJECT: Town of Smyrna – Proprietary Item Request and Justification (Traffic Signal

**Detection**)

Traffic Signal Detection: The Town of Smyrna is requesting that Wavetronix radar traffic signal detection equipment be used in all signalization projects within the Town over the next three years where Federal and/or State funding are used. The following are justification items for this request:

The Town of Smyrna currently operates and maintains 51 signalized intersections, of which Wavetronix radar detection is installed at 12 signalized intersections within the Town's jurisdiction. In addition, an upcoming Advanced Transportation Management System (ATMS) project will be adding Wavetronix to 26 intersections which brings the total to 38 signalized intersections within the Town's jurisdiction. The Town of Smyrna began utilizing the Wavetronix radar detection units to replace other technologies due to their unreliability which has resulted in increased efficiency of signalized intersection operations within the Town. Reliable detection is a key component in our efforts to provide a more efficient traffic system and to reduce air pollution within the Town of Smyrna.

The Town of Smyrna staff has been trained properly to install, operate, maintain, and troubleshoot the Wavetronix detection system. This knowledge allows the technicians to quickly diagnose problems with field units which reduces the time required to maintain the system overall and helps keep the system operational during heavy traffic times to ensure maximum capacity of the synchronized system. By utilizing these devices as the standard for the Town of Smyrna, there will be a cost savings in stocking replacement equipment which will result in faster and less costly repair.

Sincerely,

Thomas M. Rose

Director of Public Works - Town of Smyrna